

PCD 12-100 is an AGM deep cycle, stationary type, especially designed for cyclic use. By using strong grid and specific alloy, this series battery have an excellent performance on more than 3 hrs of large current discharge and more life time than other general models up to 10 years.



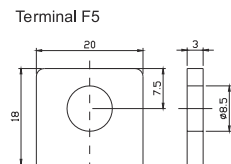
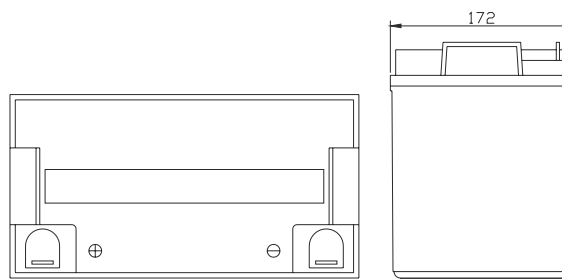
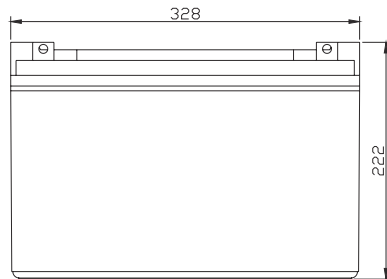
Specification

| | |
|--|--|
| Cells Per Unit | 6 |
| Voltage Per Unit | 12 |
| Capacity | 100Ah@20hr-rate to 1.75V per cell @25°C |
| Weight | Approx. 29.0 Kg |
| Max. Discharge Current | 500 A (5 sec) |
| Internal Resistance | Approx. 5 mΩ |
| Operating Temperature Range | Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C |
| Normal Operating Temperature Range | 25°C±5°C |
| Float charging Voltage | 13.6 to 13.8 VDC/unit Average at 25°C |
| Recommended Maximum Charging Current Limit | 30 A |
| Equalization and Cycle Service | 14.6 to 14.8 VDC/unit Average at 25°C |
| Self Discharge | PCD batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using. |
| Terminal | Terminal F5/F12 |
| Container Material | A.B.S. (UL94-HB) , Flammability resistance of UL94-V1 can be available upon request. |



Dimensions

Unit: mm Dimension: 328(L)×172(W)×222(H)



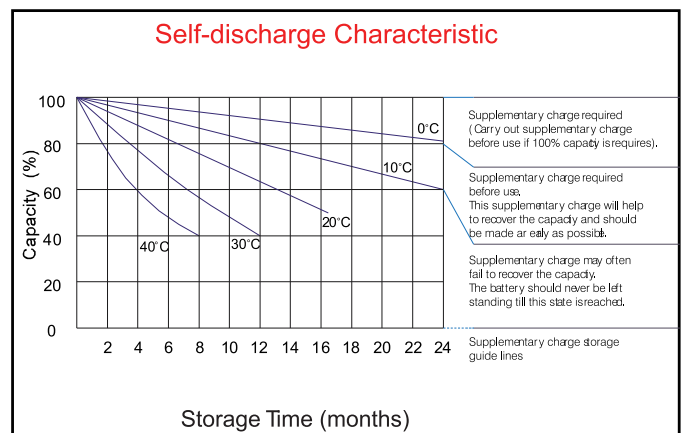
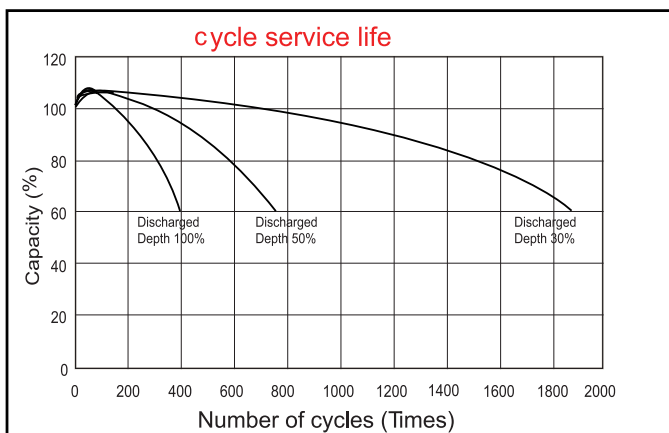
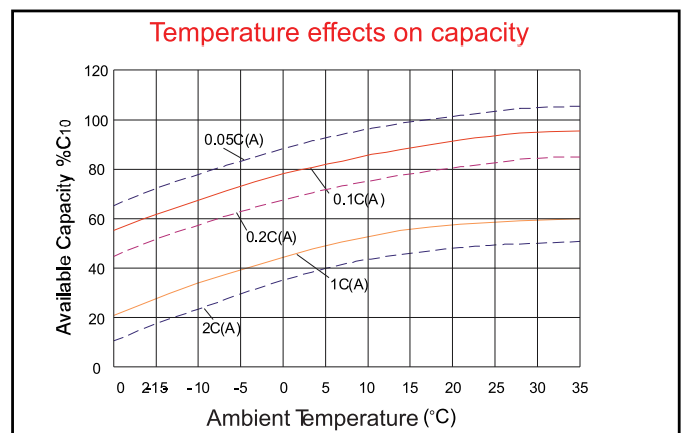
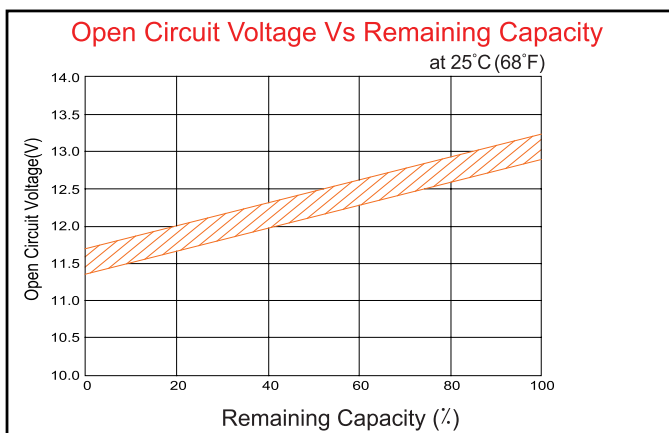
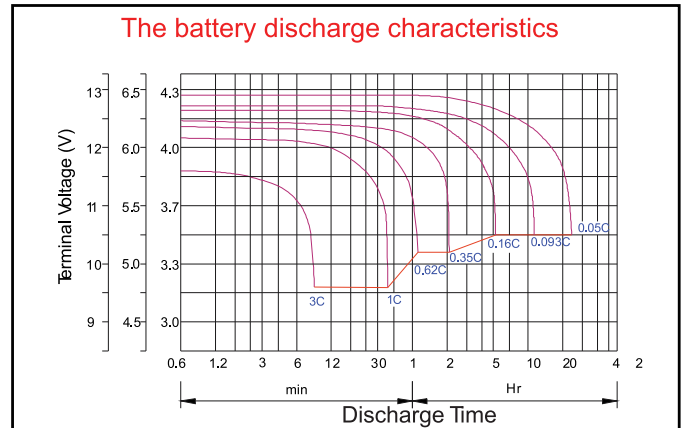
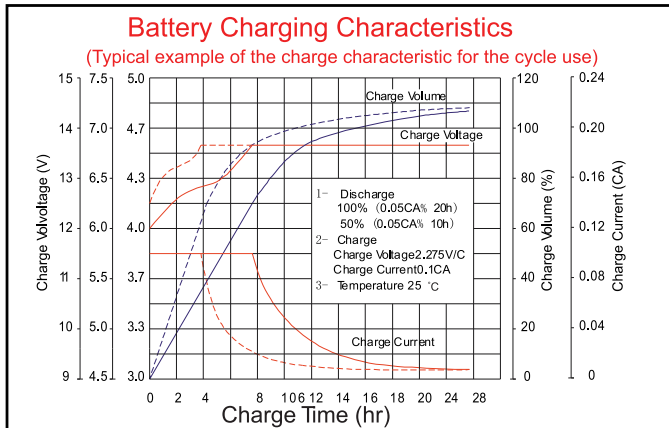
Constant Current Discharge Characteristics Unit: A (25°C)

| F. V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 2HR | 3HR | 4HR | 5HR | 8HR | 10HR | 20HR |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| 1.60V | 344.7 | 247.0 | 179.7 | 110.4 | 62.40 | 35.39 | 25.06 | 20.74 | 16.32 | 11.92 | 10.083 | 5.332 |
| 1.65V | 335.5 | 235.0 | 176.0 | 108.6 | 62.11 | 35.12 | 24.96 | 20.64 | 16.22 | 11.83 | 9.986 | 5.235 |
| 1.70V | 316.1 | 226.7 | 173.3 | 107.6 | 61.54 | 34.84 | 24.77 | 20.54 | 16.13 | 11.73 | 9.889 | 5.138 |
| 1.75V | 283.9 | 209.2 | 165.0 | 104.9 | 60.96 | 34.57 | 24.67 | 20.35 | 15.94 | 11.63 | 9.792 | 5.041 |
| 1.80V | 256.2 | 190.8 | 152.1 | 100.3 | 59.52 | 33.93 | 24.00 | 19.87 | 15.65 | 11.44 | 9.695 | 4.944 |
| 1.85V | 223.0 | 170.5 | 136.4 | 93.98 | 56.54 | 33.38 | 22.94 | 18.91 | 14.98 | 10.96 | 9.404 | 4.654 |

Constant Power Discharge Characteristics Unit: W (25°C)

| F. V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 2HR | 3HR | 4HR | 5HR | 8HR | 10HR | 20HR |
|-----------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1.60V | 3592 | 2626 | 1934 | 1246 | 713.7 | 418.6 | 289.2 | 239.6 | 188.9 | 138.4 | 113.4 | 59.89 |
| 1.65V | 3518 | 2509 | 1894 | 1230 | 710.2 | 417.0 | 288.6 | 239.0 | 187.8 | 137.8 | 112.2 | 59.30 |
| 1.70V | 3321 | 2425 | 1868 | 1216 | 705.0 | 413.1 | 286.8 | 237.9 | 187.2 | 136.6 | 111.6 | 58.72 |
| 1.75V | 2991 | 2241 | 1781 | 1188 | 698.1 | 409.3 | 285.1 | 236.2 | 185.5 | 135.5 | 110.5 | 58.14 |
| 1.80V | 2690 | 2035 | 1637 | 1134 | 680.8 | 403.3 | 278.2 | 229.8 | 182.6 | 132.6 | 109.3 | 57.56 |
| 1.85V | 2322 | 1807 | 1461 | 1063 | 645.1 | 384.7 | 264.4 | 218.9 | 173.4 | 127.9 | 105.8 | 55.23 |

All mentioned values are average values.



Charging Procedures

| Application | Charge Voltage(V/Cell) | | | Max.Charge Current |
|-------------|------------------------|-----------|-----------------|--------------------|
| | Temperature | Set Point | Allowable Range | |
| Cycle Use | 25°C(77°F) | 2.45 | 2.40~2.50 | 0.3C |
| Standby | 25°C(77°F) | 2.275 | 2.25~2.30 | |

Discharge Current VS. Discharge Voltage

| Final Discharge Voltage V/Cell | 1.75 | 1.70 | 1.60 | 1.30 |
|--------------------------------|----------|---------------|---------------|----------|
| Discharge Current(A) | 0.2C>(A) | 0.2C<(A)<0.5C | 0.5C<(A)<1.0C | (A)>1.0C |